Practice: 390 - Riparian Herbaceous Cover Scenario: #1 - Native Seeding, Cropland

Scenario Description:

Native Grasses with Forbs: This scenario addresses inadequate herbaceous plant community function or diversity within the specific transitional zone between terrestrial and aquatic habitats on cropland where natural seeding methods and/or management is unlikely to improve the plant community within a reasonable time period. This scenario applies to work not covered under NRCS Conservation Practice Range Planting (528), Forage and Biomass Planting (512), Critical Area Planting (342), Filter Strip (393), Restoration and Management of Rare and Declining Habitats (643), Streambank and Shoreline Protection (580), Vegetated Treatment Area (635), Wetland Enhancement (659), or Wetland Restoration (657). This practice can be used nation wide. The typical setting for this scenario is usually a narrow strip between the aquatic and terrestrial habitats subject to intermittant flooding and saturated soils where the exising plant community has been disturbed, destroyed, or the species diversity is unable to provide proper function and/or adequate habitat. Where the establishment of a diverse riparian herbaceous plant community is desired, an adapted mix of primarily native grasses, legumes, and/or forbs tolerant to the site conditions will be planted by broadcast and/or no-till or range drill seeding methods as necessary to accomplish the intended purpose(s). Where chemical control of undesirable vegetation, including invasives, is required to reduce competition for the desired plant community the Herbaceous Weed Control (315) practice should be used. Seedbed preparation may require LIGHT TILLAGE (disking). WHEN POLLINATOR HABITAT IS A CONSIDERATION: Include 5-10 adapted forb species that bloom sequentially throughout the growing season where feasible. To address the high diversity of riparian plant communities and their adjacent stream types that exist from the tropics to the tundra, and the deserts, prairies, mountains, and lowlands across the various regions and/or MLRA's, up to 20 adapted riparian plant community-specific scenarios may be required

Associated Practices: Herbaceous Weed Control (315), Wetland Wildlife Habitat Habitat Management (644), Upland Wildlife Habitat Management (645).

Before Situation:

The riparian zone, the specific area between terrestrial and aquatic habitats, is currently an undesirable or inadequate stand of perennial or annual vegetation and natural reseeding or vegetation management is unlikely to improve the plant community within a reasonable amount of time to adequately address streambank and/or shoreline stability, dissipate stream energy and trap sediment, improve and/or maintain water quality, and/or provide adequate habitat corridors, food and/or cover for fish, wildlife, pollinators, and/or livestock resource conern(s). Existing conditions often require suppression or eradication of current vegetation by conventional mechanical or chemical (Herbaceous Weed Control (315)) methods to ensure establishment success of the new planting.

After Situation:

The riparian zone, the transitional zone between the terrestrial and aquatic habitats, is established to an adapted, diverse vegetative plant community and is under close management to insure long term survival and ecological succession. The quality and quantity of the riparian zone components are managed to support the species that depend on it for habitat as well as the functions it performs for stabilizing the streambank and/or shoreline, dissipating stream energy and trapping sediment, and improving and/or maintaining water quality. These functions include: stream temperature moderation through shading, recruitment of non-woody organic matter, habitat for terrestrial insects and other riparian dependent species, streambank integrity, and filtration of contaminants from surface run-off into the stream.

Scenario Feature Measure: Acres of Riparian Herbaceous Cover

Scenario Unit: Acre
Scenario Typical Size: 1

Scenario Cost: \$1,899.51 Scenario Cost/Unit: \$1,899.51

Cost Details (by category):				Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$23.05	1	\$23.05
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$12.02	1	\$12.02
Tractor, agricultural, 120 HP	962	Agricultural tractor with horsepower range of 90 to 140. Equipment and power unit costs. Labor not included.	Hour	\$62.27	2	\$124.54
Foregone Income						
FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$334.10	0.5	\$167.05
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$343.51	0.25	\$85.88
FI, Wheat Dryland	1963	Dryland Wheat is Primary Crop	Acre	\$248.86	0.25	\$62.22
Labor						
Equipment Operators, Light		Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts. Mulchers	Hour	\$22.97	2	\$45.94

Materials

Six Species Mix, Native Forb	Native forb mix. Includes material and shipping only.	Acre	\$986.62	1	\$986.62
Mobilization					
Mobilization, small equipment	1138 Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$196.10	2	\$392.20

Practice: 390 - Riparian Herbaceous Cover Scenario: #2 - Native Seeding, Pasture

Scenario Description:

Native Grasses with Forbs: This scenario addresses inadequate herbaceous plant community function or diversity within the specific transitional zone between terrestrial and aquatic habitats in pasture or forestland where natural seeding methods and/or management is unlikely to improve the plant community within a reasonable time period. This scenario applies to work not covered under NRCS Conservation Practice Range Planting (528), Forage and Biomass Planting (512), Critical Area Planting (342), Filter Strip (393), Restoration and Management of Rare and Declining Habitats (643), Streambank and Shoreline Protection (580), Vegetated Treatment Area (635), Wetland Enhancement (659), or Wetland Restoration (657). This practice can be used nation wide. The typical setting for this scenario is usually a narrow strip between the aquatic and terrestrial habitats subject to intermittant flooding and saturated soils where the exising plant community has been disturbed, destroyed, or the species diversity is unable to provide proper function and/or adequate habitat. Where the establishment of a diverse riparian herbaceous plant community is desired, an adapted mix of primarily native grasses, legumes, and/or forbs tolerant to the site conditions will be planted by broadcast and/or no-till or range drill seeding methods as necessary to accomplish the intended purpose(s). Where chemical control of undesirable vegetation, including invasives, is required to reduce competition for the desired plant community the Herbaceous Weed Control (315) practice should be used. Seedbed preparation may require LIGHT TILLAGE (disking). WHEN POLLINATOR HABITAT IS A CONSIDERATION: Include 5-10 adapted forb species that bloom sequentially throughout the growing season where feasible. To address the high diversity of riparian plant communities and their adjacent stream types that exist from the tropics to the tundra, and the deserts, prairies, mountains, and lowlands across the various regions and/or MLRA's, up to 20 adapted riparian plant community-specific scenarios may be

required Associated Practices: Brush Management (314), Herbaceous Weed Control (315), Fence (382), Animal Trails and Walkways (575), Stream Crossing (578) Wetland Wildlife Habitat Habitat Management (644), Upland Wildlife Habitat Management (645).

Before Situation:

The riparian zone, the specific area between terrestrial and aquatic habitats, is currently an undesirable or inadequate stand of perennial or annual vegetation and natural reseeding or vegetation management is unlikely to improve the plant community within a reasonable amount of time to adequately address streambank and/or shoreline stability, dissipate stream energy and trap sediment, improve and/or maintain water quality, and/or provide adequate habitat corridors, food and/or cover for fish, wildlife, pollinators, and/or livestock resource conern(s). Existing conditions often require suppression or eradication of current vegetation by conventional mechanical or chemical (Herbaceous Weed Control (315)) methods to ensure establishment success of the new planting.

After Situation:

The riparian zone, the transitional zone between the terrestrial and aquatic habitats, is established to an adapted, diverse vegetative plant community and is under close management to insure long term survival and ecological succession. The quality and quantity of the riparian zone components are managed to support the species that depend on it for habitat as well as the functions it performs for stabilizing the streambank and/or shoreline, dissipating stream energy and trapping sediment, and improving and/or maintaining water quality. These functions include: stream temperature moderation through shading, recruitment of non-woody organic matter, habitat for terrestrial insects and other riparian dependent species, streambank integrity, and filtration of contaminants from surface run-off into the stream.

Scenario Feature Measure: Acres of Riparian Herbaceous Cover

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: \$1,715.53 Scenario Cost/Unit: \$1,715.53

Cost Details (by category): Price **Component Name Component Description Quantity Cost** Unit (\$/unit) Equipment/Installation Tillage, Light 945 Includes light disking (tandem) or field cultivator. Includes \$12.02 1 \$12.02 equipment, power unit and labor costs. 2 Tractor, agricultural, 120 HP 962 Agricultural tractor with horsepower range of 90 to 140. Hour \$62.27 \$124.54 Equipment and power unit costs. Labor not included. 960 No Till drill or grass drill for seeding. Includes equipment, \$23.05 1 \$23.05 Seeding Operation, No Acre Till/Grass Drill power unit and labor costs. Foregone Income 8.5 FI, Grazing AUMs 2079 Grazing is the Primary Land Use AUM \$15.43 \$131.16 Labor Equipment Operators, Light 232 Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, \$22.97 2 \$45.94 Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers

Materials

Six Species Mix, Native Forb	Native forb mix. Includes material and shipping only.	Acre	\$986.62	1	\$986.62
Mobilization					
Mobilization, small equipment	1138 Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$196.10	2	\$392.20